DOCUMENT RESUME

ED 155 719 CS 204 193

AUTHOR Hutchison, Laveria F.
TITLE Reducing Illiteracy by Adding Interest to Adult Basic Education.
PUB DATE [77]
NOTE 12p.; Study prepared at the University of Houston

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Adult Basic Education; Adult Reading Programs; *Attendance Patterns; *Illiteracy; Illiterate Adults; *Individualized Instruction; Individual Needs; Intermode Differences; *Motivation; *Personal Interests; *Reading Instruction; Reading Research; Teacher Developed Materials

ABSTRACT

Statistics show that illiteracy in the United States is still a problem, particularly for adults over forty-five years of age. To test the effects of preferred-interest lessons on attendance in an adult reading program, a group of 20 adults received reading instruction by traditional teaching methods (large group arrangement and commercial texts/kits) while another group of 20 adults received individualized instruction, during which the teacher developed materials and activities that matched the individual students' reading and learning preferences. The attendance patterns for the 15-week instructional period show that the adults in the "preferred interests" group attended classes with significantly greater regularity. The study concludes that the increased use of personalized instruction in adult education will lead to a reduction of illiteracy as a nationwide problem in the United States. (RL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Laveria F. Hutchison

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED155719

REDUCING ILLITERACY BY ADDING INTEREST TO ADULT BASIC EDUCATION

LAVERIA F. HUTCHISON

INTRODUCTION

Functional literacy is the ability to recognize and understand words, phrases, and sentences that directly affect basic personal experiences such as understanding traffic signs, drivers' manuals, want ads and road maps. (12:352) Thus, within the field of education functional, or survival, literacy holds an increasingly prominent position. But, although literacy provides obvious recognizable benefits, educators' efforts to foster it have often been impeded by students' attitudes toward past learning experiences and failures and significant segments of the American population have not yet acquired this ability.

Even though the American population has experienced several generations of free and compulsory education, the presence of illiteracy in the United States is indicated by the following census data, summarizing figures and statements cited by Allen in 1969.

(1) One of every four students in the United States has significant reading deficiences.

(2) Half the students in most large public school systems read below expectation.

(3) The United States' population includes more than three million illiterates.

(4) Approximately half the United States' unemployed youth, ages sixteen to twenty-one, are functionally illiterate. (1)

LAVERIA F. HUTCHISON is Assistant Professor of Curriculum and Instruction at the University of Houston - Central Campus.

Reprints and sample lesson formats may be requested from Dr. Hutchison, College of Education, University of Houston, Houston, Texas 77004

CS204193

In 1976, the National Right to Read Effort utilized eighty-six item exercises on the Mini-Assessment of Functional Literacy to determine the minimally adequate functional reading performance of randomly selected seventeen year-old students. The following statements summarize conclusions based upon item analysis of one component of the Mini-Assessment.

(1) 87.4% of the students attained the minimally adequate performance standard.

(2) 89.1% of the female students attained the minimal standard, while only 85.4% of the males did so.

(3) 91.8% of the white students attained the standard in contrast to 58.4% of the blacks. (9:15)

ILLITERACY IN THE UNITED STATES

In 1976, the United States Bureau of Census reported an illiteracy rate of one percent of the civilian non-institutional population fourteen years old and over, representing more than 1.4 million persons. (16:125)

Illiteracy and Age

Illiteracy among Americans is an age-related phenomenon. For those between forty-five and sixty-four years of age, the illiteracy rate is seven times that for those between twenty-five and forty-four, and is more than eleven times the rate for those between fourteen and twenty-four. Of the 1,443,000 illiterates indicated by population studies, more than one million are over forty-five years of age. (10:22)

Illiteracy and Race

Census surveys have consistently found that the inability to read and write is more prevalent among the non-white population than among the white population. In 1870, 79.9 percent of the non-white population was reported to be illiterate, while only 11.5 percent of the white population was classified

as such. In 1900, the percentages were 44.5 for non-white and 6.2 for whites. Since 1930 efforts have been made to eradicate illiteracy among citizens of the United States and, since 1959 the illiteracy level has decreased from 2.6 to 1.4 million. However, as late as 1969, the percentages of non-whites and whites remained comparable with illiteracy rates of 3.6 percent for non-whites and 0.7 percent for whites. (15:1)

REDUCING ILLITERACY IN THE UNITED STATES

Serious efforts during the present decade to determine reasons for the continuation of illiteracy in the United States have not yet provided theoretical procedures for the reduction of illiteracy. Thus, for the purpose of analyzing methodologies which foster the reduction of illiteracy, a concept is being introduced that may assist illiterates who wish to become functionally literate through an instructional program that provides for practical and applicable learning.

Educators (Asheim, 1956; Cox, 1966; Mills, 1969; and Schnell, 1973) continue to find theoretical evidence for the causes of functional illiteracy, usually concluding a possible explanation involving learning interests. But it is naive to believe that functionally illiterate persons do not desire to understand and participate in their total environmental make-up. For these persons do indeed possess a desire to obtain knowledge if it is completely practical and applicable to their environment. Bonanni (1973) maintained that one of the basic requirements of a fundamental literacy program is the integration of literacy with an occupation or other mentally interesting concepts. This interest concept is based on the premise that instructional materials should capitalize on the adult's interests if instruction is to be successful.

THE INTEREST CONCEPT:
TWENTIETH CENTURY APPLICATION OF AN ANCIENT IDEA

The interest concept is not a new idea, for Herbart (1970) developed a theory of educational training based upon interest and theorized that the purpose of education was to activate the spontaneous interest forces in the individual by directing him toward numerous and varied objects. However, it remained for Dewey to develop a theory of interest that has been interpreted by educators for many years. Dewey (7:16) defined interest in these terms: "Interest is personal; it signifies a direct concern; a recognition of something at stake, something whose outcome is important for an individual. It has emotional as well as its active and objective sides." For Dewey (6:408) "self and interest are two names for the same fact: the kind and amount of interest actively taken in a thing reveals and measures the quality of selfhood which exists."

Fryer (1931) surveyed research which was reported between 1921 and 1931 and which concerned both the theoretical significance and the clinical application of interest measurement. He concluded that interest stood out as a separate unit of psychological activity distinct from other units such as abilities, emotions, and motivations. Additionally, Jan-Tausch (1970) reported a summary of research on the interest concept and concluded that it has significant implications for the teaching of reading at the initial stages of instruction. Thus, the concept of teaching functionally illiterate adults in terms of their preferred reading interests is slowly gaining importance in the field of adult basic education. Educators feel that the adoption of the interest concept to be used with functionally illiterate adults and the implementation of instructional strategies based upon this concept may assist in reduction of reading failures among youth and adults.

METHODOLOGICAL APPLICATION OF THE INTEREST CONCEPT

This author conducted a study to examine the effects of instructional strategies based upon the preferred interests of twenty adults who had been classified as functionally illiterate on the basis of scores lower than a grade level of 4.0 on: (1) the Standard Reading Inventory, Form A; (2) the Adult Basic Learning Examination, Level I, Form A; and (3) a teacher assessment of the student's reading performance which was completed prior to pre-testing so that the judgment of the teacher was not affected by pre-test results.

Purpose and Design of the Study

The present study was developed to determine whether lessons designed to emphasize preferred interests would improve functionally illiterate adults' class attendance during a fifteen week instructional period in adult basic education classes. Thus, this study tested the hypothesis that there is no significant difference between the attendance record of functionally illiterate adults assigned interest-oriented reading materials and the attendance record of those not receiving this type of instruction. This study attempted, then, to answer the following question: Will functionally illiterate adults who study personally interesting reading materials more regularly attend adult basic education classes than adults who do not utilize this type of instructional reading material? Therefore, the study's experimental group was administered a series of thirty such interest-directed lessons, while a suitable control group received a series of thirty lessons not designed to emphasize preferred interests.

Subjects in the Experimental Group

This study's experimental group was made up of twenty adults who attended an urban adult education center and who had been classified as functionally illiterate according to the criteria listed above. This group was made up of

adults with a variety of interest preferences which were emphasized in this portion of the study, but were not a factor concerning the control group. The experimental group's interest preferences and the number of adults preferring each category are as follows: Sports, 7; Banking, 2; Bible Reading, 7; Children's Books, 2; and, Black Studies, 2.

Instructional Procedure for the Experimental Group

The instructional sessions for the experimental group occurred over a fifteen-week period with classes on Tuesday and Thursday evenings from six o'clock to eight o'clock. Each instructional session, which was conducted by an employed teacher, included a ten-minute supplementary reading discussion segment, a thirty-minute direct-teach segment, a twenty-minute skill practice segment, a twenty-minute skill application segment, a twenty-minute supplementary reading selection segment, and a twenty-minute snack/recreational segment.

The direct-teach segment involved individualized instruction conducted by the group's regular teacher. When introducing the skills, the teacher emphasized the ones needed to master each specific lesson. Word attack, sight word, and comprehension skills were greatly stressed during this period. During the skill practice segment, each student used duplicated worksheets which were printed with primary type and which emphasized skills introduced during the direct-teach segment. The worksheets also accented skills to be utilized during the skill application segment, which stressed the skills introduced during the direct-teach and the skill practice segments. These skills were to be used by the student in comprehending a short story written especially for his individual reading/learning preference. After reading his story silently, each student completed a brief worksheet that related to his story and that was designed to measure his reading comprehension. The supplemental reading segment of the lesson permitted each student to select

out-of-class reading materials to be read at the student's diagnosed independent reading level. These materials were discussed at the next class session.

Subjects in the Control Group

The control group for this study was made up of twenty adults who attended an urban adult education center and who were classified as functionally illiterate according to the same criteria used to classify those in the experimental group. However, this portion of the study did not emphasize the subjects' interest preferences.

Instructional Procedure for the Control Group

Instructional sessions for the control group occurred during the same fifteen-week period as did for the experimental group, but the control group met on Monday and Wednesday evenings from six o'clock to eight o'clock. The instructional sessions for this group, which were conducted by an employed teacher, were not segmented as were those for the experimental group. Instruction for the control subjects occurred in a large group arrangement that utilized commercially prepared instructional workbooks and kits.

DATA ANALYSIS

This study utilized a non-equivalent control group research design, and analysis of variance was the statistical treatment applied to the data collected. The F-ratio, derived from the analysis of variance, was used to test the proposed non-difference between the means of the scores of the experimental group and those of the control group. The .05 level of confidence was designated as the standard of significance.

RESULTS OF THE STUDY

Question: Will functionally illiterate adults who study personally interesting reading materials more regularly attend adult basic education classes

than adults who do not utilize this type of instructional reading material?

The students in the experimental group were compared to those in the control group on the basis of their attendance records during their experience of different instructional procedures. Post-mean attendance figures indicate a contrast between 28.25000 for the experimental group and 20.7000 for the control group.

Analysis of variance differentiating the attendance rates for the two groups shows a computed F-ratio of 52.58151 which is greater than the tabled F-value of 4.06 for 1 and 38 degrees of freedom. Since this difference is significant at the .05 level of confidence, it may be concluded that students who utilized interest-oriented materials attended adult basic education classes more regualrly than did students who used traditional instructional materials not specifically designed or selected according to preferred reading/learning interests.

TABLE 1. ATTENDANCE RECORD MEANS FOR THE EXPERIMENTAL GROUP AND THE COMPARISON GROUP

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Squares	F-Ratio
Between Groups	570.02500	1	570.02500	52.58151*
Error	411.95000	38	10.84079	

*Significant at the .05 level of confidence.

CONCLUSIONS AND IMPLICATIONS

The purpose of this investigation was to determine whether lessons designed to emphasize preferred interest would improve functionally illiterate adults' attendance records for adult basic education evening classes. It was found that the attendance records of students receiving specially prepared interest-oriented instructional reading materials were superior to the attendance

records of those students not receiving such materials. While this in itself is not a surprising finding, it should be mentioned that previous to this study the investigator had determined that all the subjects were absent one night per week from their adult basic education classes. Thus, with regard to silent reading comprehension, the adults in both groups were similar pre-experimentally. It appears, then, that the students receiving special instructional materials would be able to generate more instructional concepts simply by being in attendance more frequently than the adults in the control group who did not experience such personalized instruction.

A practical implication of this study involves a need for providing interest-oriented instructional materials that stimulate and motivate functionally illiterate adults to react positively to instruction designed to consider their learning needs. From a methodological point of view, a much stronger case for the effectiveness of such specialized instruction could be made with a longitudinal study that involved a larger population of functionally illiterate adults. However, despite the fact that the present study was not longitudinal, it is undeniably evident in the results of this investigation that instructional strategies based upon the preferred interests of adults classified as functionally illiterate did result in improving attendance records. Whether the improved attendance records were the result of the particular strategies employed, or whether those specialized strategies produced increased attendance which could make greater achievement gains possible can be debated and resolved through further research.

CONCLUSION

From the information presented in this article, it is clear that illiteracy is a nationwide problem. A final thought is to ask how this problem could be reduced. Analysis of post-data from this study indicates that personalized instruction → better attendance → better education → less illiteracy → reduction of illiteracy as a nationwide problem.

REFERENCES

1. Allen, James E. "The Right to Read---Target for the 70's." Address delivered before the National Association of State Boards of Education, September 23, 1969.

2. Asheim, Lester. "What Do Adults Read?" In Nelson B. Henry (Ed.), Adult Reading. Chicago, Illinois: The University of Chicago Press, 1956.

3. Bonanni, Camillo. A Literacy Journal, Series 93. New Dehli, India: The Indian Adult Education Association, 1973.

4. Comptroller General of the United States. The Adult Basic Education Program: Progress in Reducing Illiteracy and Improvements Needed. Report to the Congress. Washington, Comptroller General, 4 June 1975.

5. Cox, Robert P. "A Study to Determine the Educational Interests of Adults in Sioux City, Iowa, Who Did Not Complete High School." Dissertation Abstracts, 1966, 26, 4414.

6. Dewey, John. Democracy and Education. New York: The Macmillan Company, 1917.

7. _____. Interest and Effort in Education. Chicago, Illinois: Houghton Mifflin Company, 1913.

8. Fryer, Douglas. The Measurement of Interest. New York: Henry Holt Company, 1931.

9. Gadway, Charles. Functional Illiteracy: Basic Reading Performance. The National Assessment of Educational Progress---A Project of the Education Commission of the States. Denver, Colorado, 1976.

10. Harsh, J. Richard. "Illiteracy in the United States." Information Base for Reading: A Critical Review of the Information Base for Current Assumptions Regarding the Status of Instruction and Achievement in Reading in the United States. Edited by Reginald Corder. Berkeley, California: National Testing Service, 1971.

11. Jan-Tausch, Evelyn. "Discovery and Measurement of Interest in Reading." Reading Diagnosis and Evaluation. Edited by Dorothy DeBoer. Newark, Delaware: International Reading Association, 1970.

12. Kelly, Leonard P. "Survival Literacy: Teaching Reading to Those With a 'Need to Know'" Journal of Reading, 17:352-353, 1974.

13. Mills, Beatrice M. "The Educational Interests and Needs of Older Adults in Selected Presbyterian Churches." Unpublished Doctoral dissertation, Indiana University, 1968. Dissertation Abstracts, XXIX-A (1969), 2986-A.

14. Northcutt, Novell. "Functional Literacy for Adults." In Reading and Career Education: Perspectives on Reading. No. 19, pp.43-49. Edited by Duane M. Nielsen and Howard F. Hjelm. Newark, Delaware: IRA, 1975.

15. U.S. Bureau of the Census. Illiteracy in the United States: November 1969. Current Population Reports, Population Characteristics, P-20, No. 217. Washington, D.C.: March 10, 1971.

16. U.S. Bureau of the Census, Statistical Abstracts of the United States: 1976. (97th edition.) Washington, D.C., 1976.